



MARS Reporting & Querying

What's New in SAP Business Objects Business Intelligence 4.2





Overview

- This document highlights **noticeable new and improved features** of version 4.2 of SAP Business Objects Business Intelligence, and the value added for end users.
- MARS will be releasing this version in **May 2017**.
- Intended Audience:
 - This document is for MARS Reporting and Querying Users.
 - **Pages 4-10 are for Business & Power Users.**
 - **Pages 11-20 are for Power Users.**



Table of Contents

○ New / Improved Features for Business & Power Users	
● Overview	4
● BI Launch Pad	5
● Web Intelligence	9
○ New / Improved Features for Power Users	
● Overview	11
● Web Intelligence	12
○ Arrange by Data Source	13
○ Excel as a Data Source	14
○ Formatting Numbers	15
○ Cell References	16
○ Geomaps	18
○ Cascading Input Controls	20

New / Improved Features for the Business & Power Users - Overview -

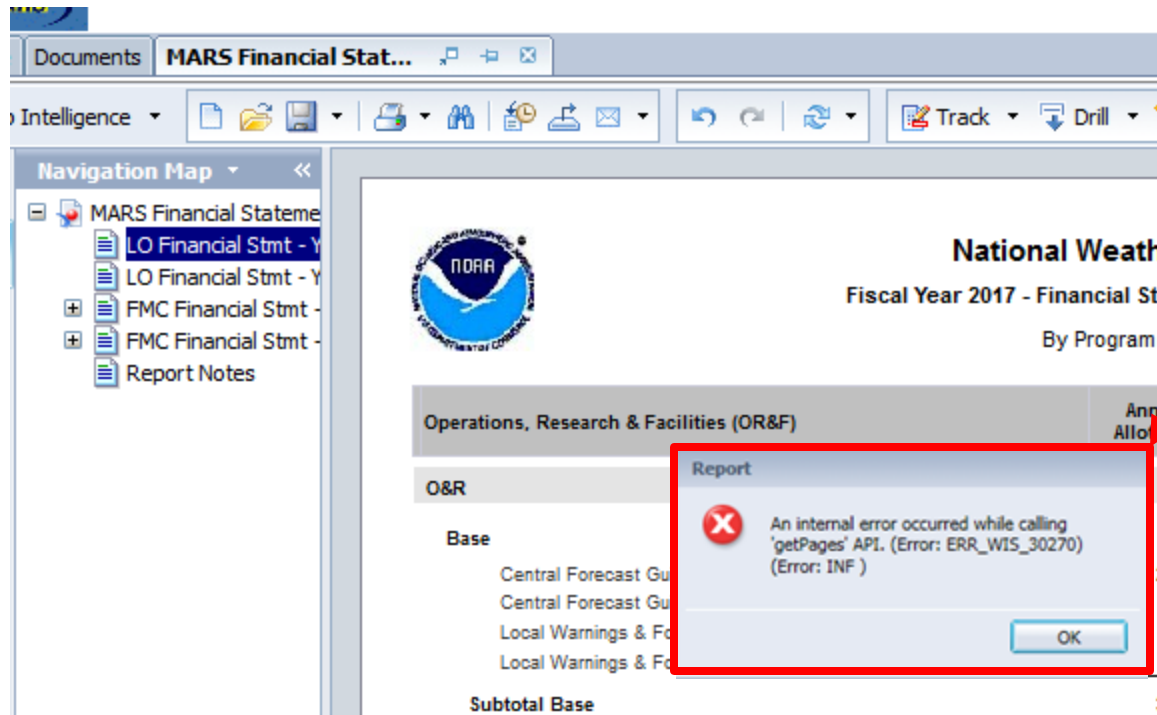
Feature	Description
BI Launch Pad	
Document Timeout	<p>In V4.1, when switching between tabs, a document could time out after 5-10 minutes of inactivity and the user would get an error message. This issue was sporadic, but is now resolved in V4.2.</p> <p>When the issue occurred, the user had no other option than to close the report and re-open it. The resolution of this issue will improve the user experience and productivity.</p>
Recycle Bin	<p>MARS Administrators can restore any personal objects (documents or folders) that a user deleted accidentally. It will not be possible to restore objects 30 days after the deletion date.</p>
User Notification	<p>Provides another mechanism for the MARS team to communicate changes to R&Q users via an alert displayed in BI Launch Pad (near the MARS logo).</p>
Significant Performance Improvement	<p>Faster Navigation and platform search.</p>
Web Intelligence	
New Export Window	<p>Offers a new option to export better quality images to Excel or PDF.</p> <p>In addition, the “Data” checkbox now makes it easier to export the raw data (without any report formatting) into a csv file that can be opened in Excel.</p>
Faster Report Execution Times	<p>Especially for reports with multiple queries because queries will execute in parallel.</p>



BI Launch Pad

For the Business & Power Users

Document Timeout



- **Description:** in V4.1, when switching between tabs, a document could time out after 5-10 minutes of inactivity and the user would get an **error message** (See screenshot).

- When the issue occurred, the user had no other option than to close the document and re-open it. This issue was sporadic, but is now resolved in V4.2.

- **Note:** There is a session timeout (30 minutes) and there is a separate document timeout (60 minutes): If you leave a document inactive for more than 60 minutes while working on another document, although your session will still be active, the inactive document will time out.

Recycle Bin



- The MARS team can restore deleted content (Folders or Documents) in users' personal folders.
- It will not be possible to restore content 30 days after the deletion date.
- User has to let the MARS Help Desk know that the deletion occurred.

User Notification

- Provides another mechanism for the MARS team to communicate changes to R&Q users via a notification alert displayed in BI Launch Pad.

The screenshot displays the MARS BI Launch Pad interface. At the top, a yellow notification bar with a warning icon states: "System Maintenance scheduled on 04/01/07 at... See more...". A red arrow points from this bar to a detailed alert window titled "Alert Information - System Maintenance scheduled on 04/01/07 at 06:00PM". The alert window contains the following information:

- Title:** System Maintenance scheduled on 04/01/07 at 06:00PM
- Message:** Dear MARS Users MARS will be unavailable for Maintenance work.. Please save ally our work and log off in time for the system Maintenance scheduled on 04/01/2017 at 06:00PM
- Trigger Time:** Apr 13, 2017 1:05 PM

Below the alert window, the "My Alerts" folder in the "My Documents" sidebar is highlighted with a red box. A red arrow points from this folder to a table of alerts.

Title	Received On
System Maintenance scheduled on 04/01/07 at 06:00PM	Mar 27, 2017 12:07 PM
System Maintenance scheduled on 04/01/07 at 06:00PM	Mar 28, 2017 10:10 AM
System Maintenance scheduled on 04/01/07 at 06:00PM	Mar 28, 2017 10:11 AM
System Maintenance scheduled on 04/01/07 at 06:00PM	Apr 13, 2017 1:05 PM

- The notification alert is also available in the "My Alerts" folder in the user's Favorites.

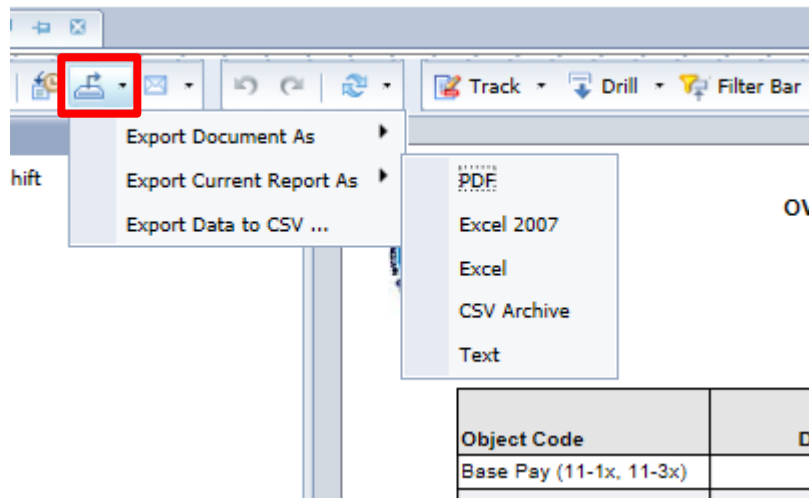


Web Intelligence

For the Business & Power Users

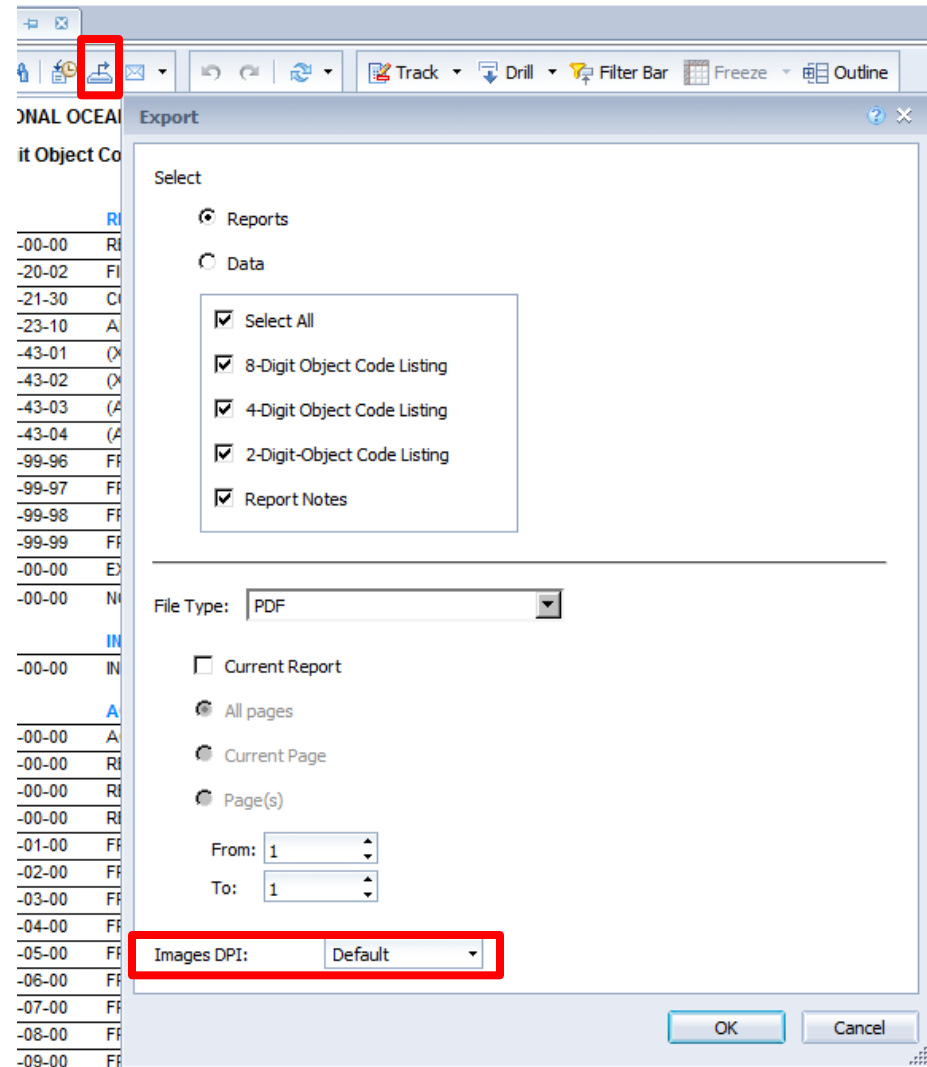
New Export Window

Old Business Objects version (V 4.1)



- All the drop-down menu options of the Export feature in V4.1 have been combined into a single Window in V4.2.
 - New option added: Select a better image quality when exporting a document to Excel or PDF.
- The “Data” option in the Export window allows you to export raw data to a csv file that can be opened in Excel.

New Business Objects version (V 4.2)



New / Improved Features for the Power Users - Overview -

Feature	Description
Web Intelligence	
Arrange by Data Source	The “Available Objects” panel now includes an option to arrange objects by universe folders when using multiple universes in the same report.
Excel as a Data source	Users can now upload an Excel file into their personal folders and use it as a data source to create a report.
Formatting Numbers	The “Format Number” menu now offers more customization capabilities.
Cell References	<p>Variables that return the value of a specified cell.</p> <p>Cell References can be used in any formula or displayed anywhere in a document.</p> <p>The value of the Cell Reference changes in real time to reflect the current value of the associated cell.</p> <p>In addition to the “Variables” folder, the “References” folder is now available in the “Available Objects” panel in Web Intelligence.</p>
Geomaps	<p>An integrated geographical database covering countries, regions, sub-regions and cities allows you to link (geo-qualification) geo-specific dimensions by name or latitude/longitude.</p> <p>Three additional geo-enabled charts (Chloropeth, Geo Bubble, Geo pie) allow you to visualize your results set on a map</p>
Cascading Input Controls	<p>Groups of input controls can be created to refine the input control values based on a previous selection</p> <p>Facilitate data exploration and discovery</p>

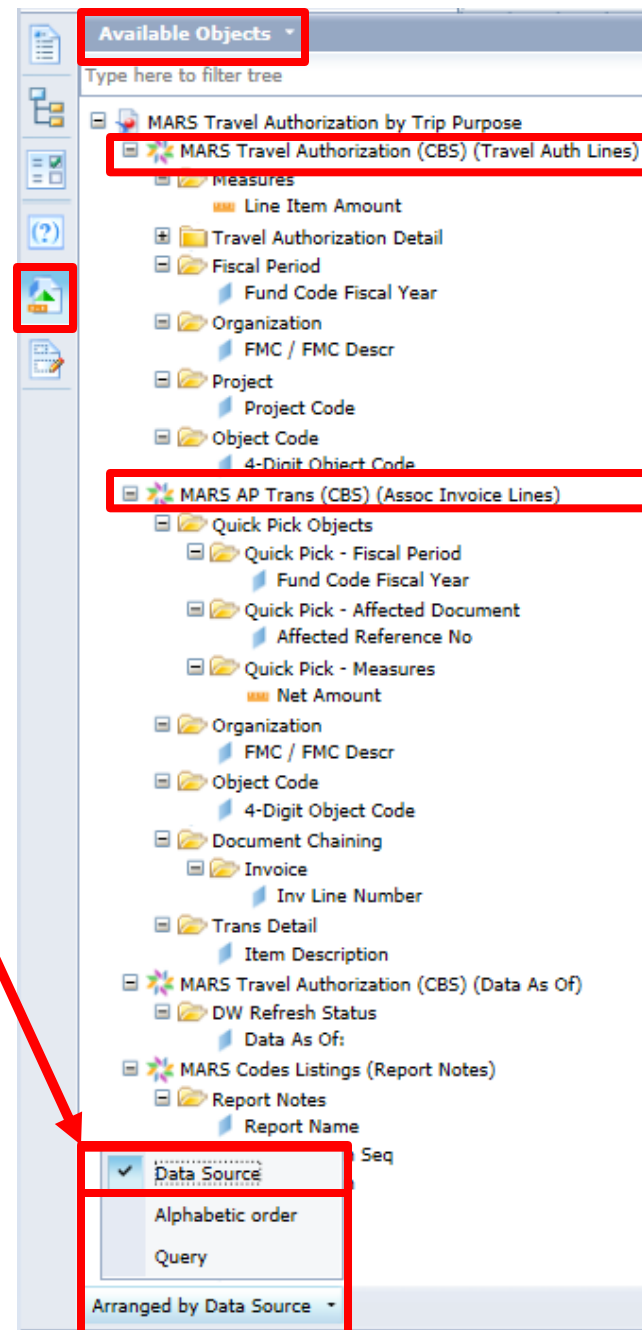


Web Intelligence

For the Power User

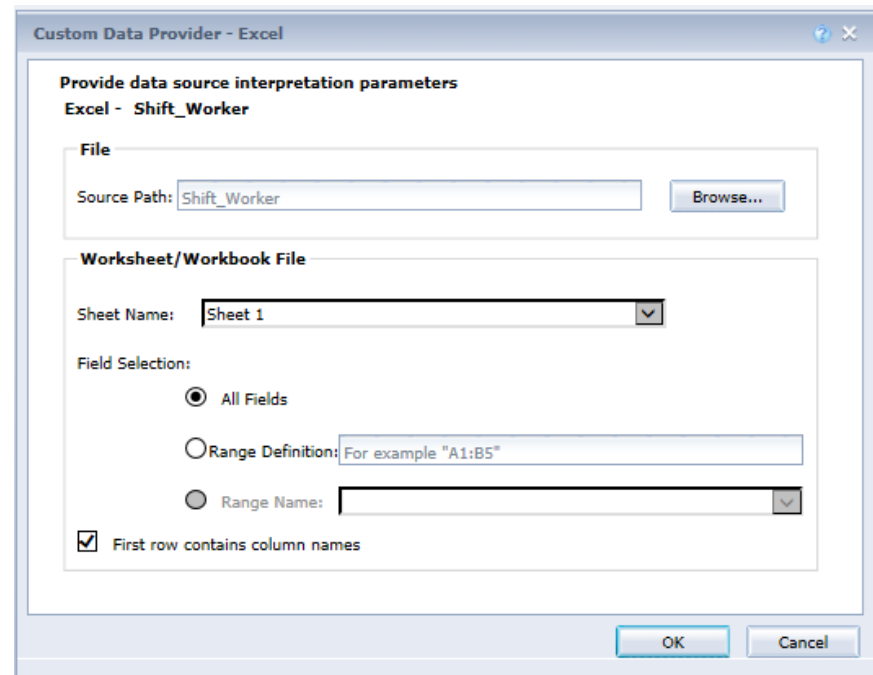
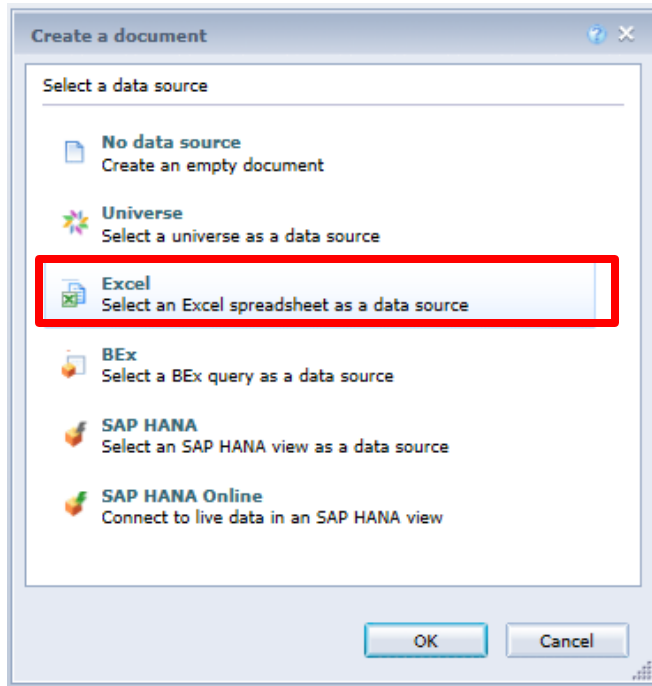
Arrange by Data Source

- In the “Available Objects” side panel, this new option allows to sort objects by Universe folders.



Excel as a Data Source

- An Excel Spreadsheet imported into your personal folder can be used as a Data Provider for your WebI report.
- Once you have used an Excel workbook as a data provider for a report, do not delete the Excel workbook from BI Launch Pad. You can move the Excel workbook to another folder, or rename it.
- You cannot maintain the Excel workbook within BI Launch Pad. You must update your workbook's data in its current location (Example: network drive), then replace the BI Launch Pad version of the workbook. You can add columns and tabs to your Excel workbook, but do not delete, rename, or reorganize columns and tabs.



Formatting Numbers

Old Business Objects version (V 4.1)

2016 Actual	2017 MARS Budget	Variance	% Variance: Variance / 2016 Actual
\$1,424,959.38	\$1,419,656.00	(\$5,303.38)	-0.37%

Format Cell

General

Number

Alignment

Font

Border

Appearance

Default

1,234.57

1.234567E3

1235

1235; (1235)

1234.57

1,235

\$1,234.57; (\$1,234.57)

\$1,234.57 (\$1,234.57)

\$1,235; (\$1,235)

\$1,235 (\$1,235)

\$1,234.57; -\$1,234.57

\$1,234.57 -\$1,234.57

\$1,235; -\$1,235

\$1,235 -\$1,235

€1,234.57; -€1,234.57

€1,234.57 €-1,234.57

€1,235; -€1,235

€1,235 €-1,235

¥1,235; -¥1,235

¥1,235 -¥1,235

123.456,70%

New Business Objects version (V 4.2)

Format Number

Default

Number

Currency

Date/Time

Boolean

Percentage

Custom

Sample

\$1,234.57; (\$1,234.57)

\$1,234.57; (\$1,234.57)

\$1,235; (\$1,235)

\$1,235; (\$1,235)

\$1,234.57; -\$1,234.57

\$1,234.57; -\$1,234.57

\$1,235; -\$1,235

\$1,235; -\$1,235

€1,234.57; -€1,234.57

€1,234.57; -€1,234.57

€1,235; -€1,235

€1,235; -€1,235

¥1,235; -¥1,235

¥1,235; -¥1,235

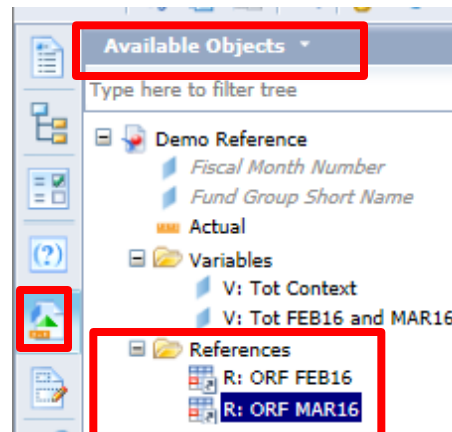
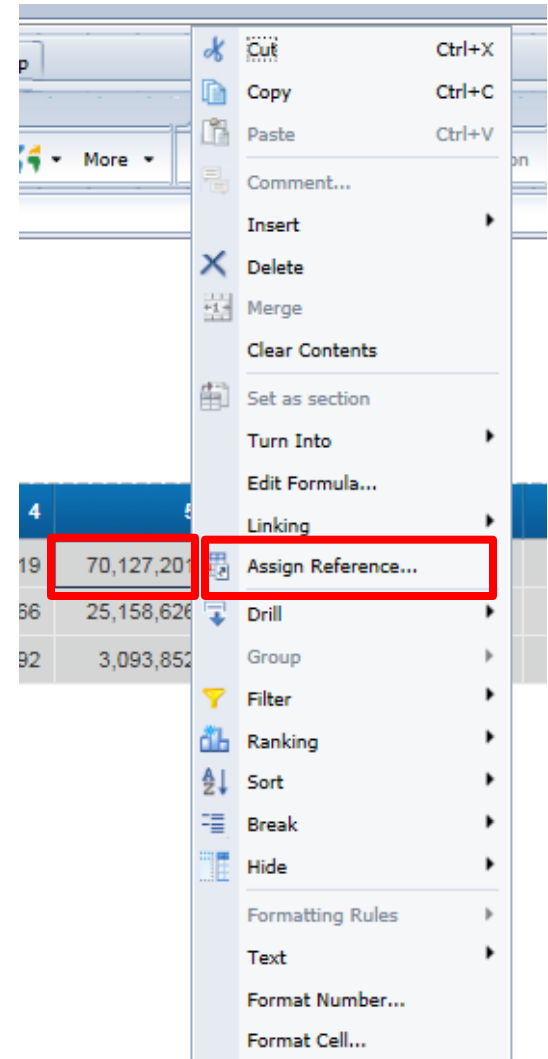
Actual
\$22,367.18
\$27,790.67
\$21,450.09
\$71,607.94
\$49,129.57
\$49,129.57
\$9,649.02
\$9,649.02

- V4.1: Format Number is under the “Format Cell” menu.
- V4.2: Format Number is a menu of its own and offers many more customization capabilities.

15

Cell References

- A reference is a variable that returns the value of a specified cell in the document.
- The value of the reference changes (but keeps its own context) in real time to reflect the current value of the associated cell.
- Can be used in any calculation: the building of formulas / variables becomes much easier.
- Prior to this feature, users had to manually add contexts (not an easy concept to understand).
- All References are listed in the “References” folder located in the “Available Objects” side panel.
- References are consumed in the entire document.



Cell References: Example

- Calculate the total obligations for ORF and for FEB + MAR

	1	2	3	4	5	6	7
ORF	53,278,635	64,584,456	66,584,447	67,328,619	70,127,201	92,546,359	78,478,294
PAC	5,873,132	1,020,515	6,173,247	8,078,366	25,158,626	10,773,315	6,064,578
REIMB	1,936,319	2,892,172	3,905,575	2,341,192	3,093,852	3,809,667	2,260,018

- **Solution 1: Formula with context**

=[Actual] Where ([Fiscal Month Number] InList (5;6) And [Fund Group Short Name]="ORF")

=> Not straightforward.

Sum ORF for
FEB16 and
MAR16 using
Context

162,673,559.22

- **Solution 2: Cell References**

- Assign a reference variable for each of these 2 cells (ORF;5) and (ORF;6).
- Sum the above 2 reference variables.

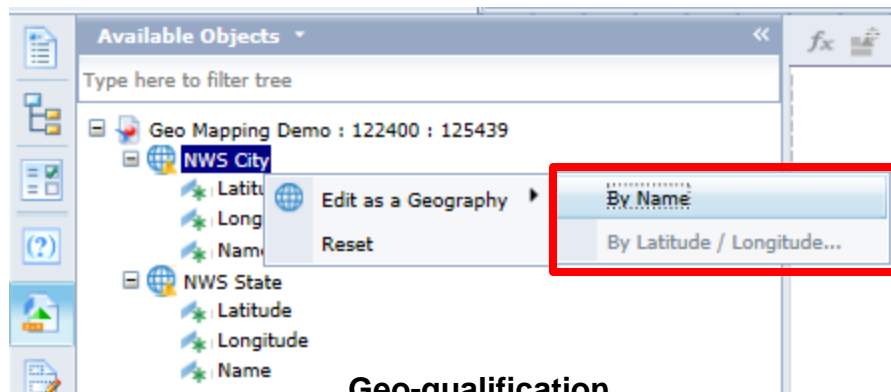
=> More intuitive.

Sum ORF for
FEB16 and
MAR16 using
Reference

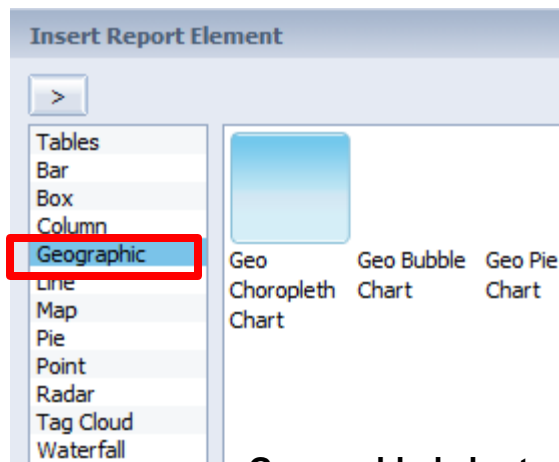
162,673,559.22

Geomaps

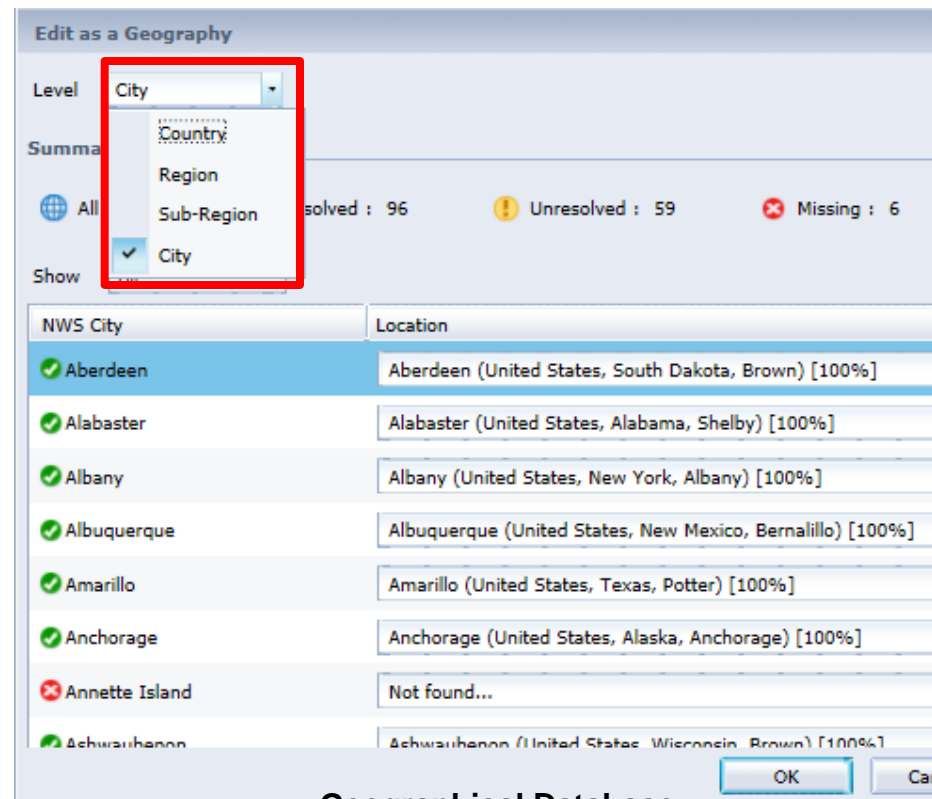
- Dimensions, variables and merged dimensions from your results set can be **geo-qualified**.
 - By name: A geographical database is now embedded within Webl (4 different layers: Country, Region, Subregion, City).
 - By Latitude / Longitude, specified using other dimensions. Lat./Long. allow you to extend the embedded geo-database.
- 3 additional geo-enabled charts (Chloropeth, Geo Bubble, Geo pie) allow you to visualize your results set on a map.



Geo-qualification



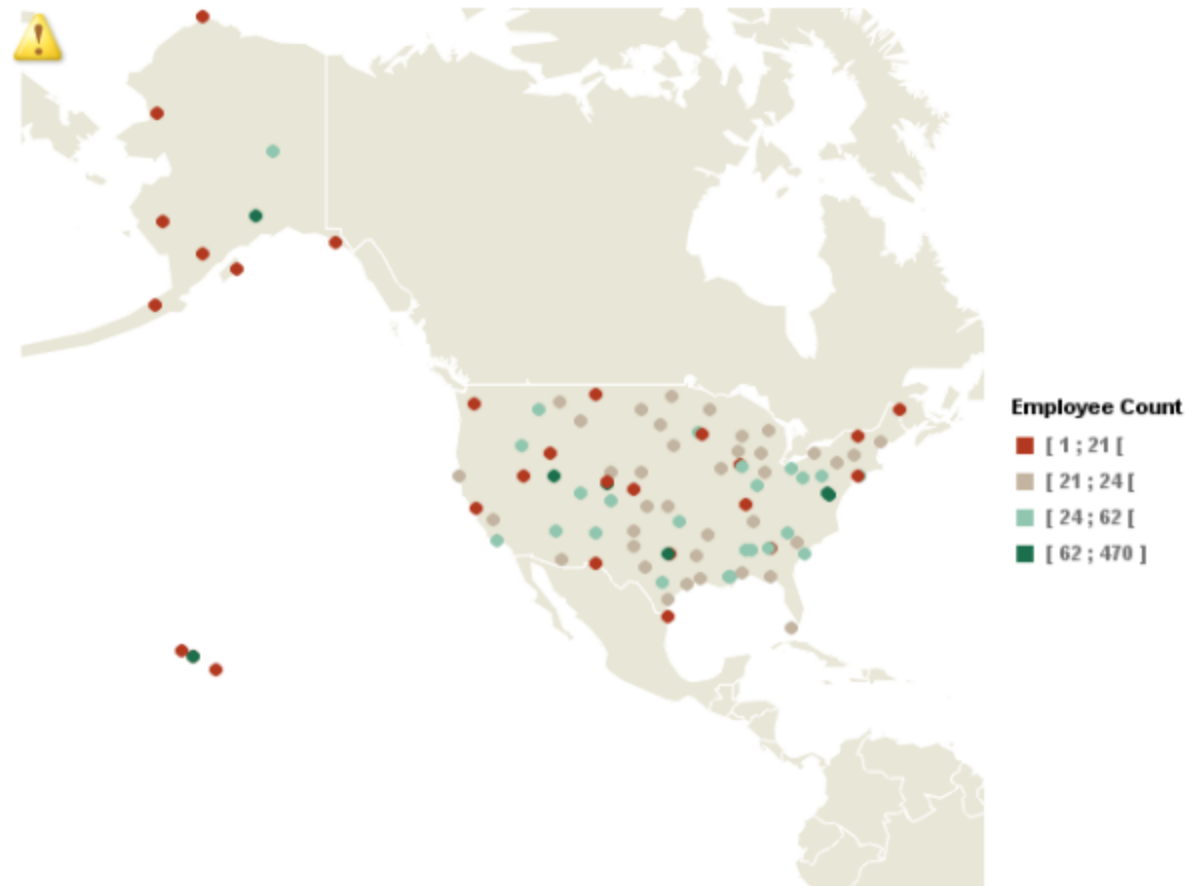
Geo-enabled charts



Geographical Database

Geomaps: Visualize your results on a map

NWS City	NWS State	Employee Count
Aberdeen	SD	23
Alabaster	AL	24
Albany	NY	22
Albuquerque	NM	28
Amarillo	TX	22
Anchorage	AK	115
Annette Island	AK	3
Ashwaubenon	WI	22
Auburn	WA	4
Aurora	IL	4
Barrigada	GU	23
Barrow	AK	3
Bay St. Louis	MS	30
Bellemont	AZ	24
Bethel	AK	4
Billings	MT	22



Cascading Input Controls

- In V4.2, Input Controls can be placed in groups: The values from one control affects all the others in the group (Input Controls are now Interactive report filters that cascade)
- The cascading Input Controls facilitate Data discovery and exploration.

The screenshot displays the SAP Input Controls configuration interface. On the left, the 'Input Controls' pane shows a tree structure with 'Document Input Controls (0)' and 'Report Input Controls (3)'. The 'Report Input Controls' section is expanded, showing three cascading filters: 'Fund Group (ORF, PAC, Etc.)' with a dropdown menu, 'Fund Code / Descr' with a dropdown menu, and 'Program Code / Descr' with a dropdown menu. A red box highlights the 'Group' button in the top toolbar, and another red box highlights the three cascading filters. A red arrow points from the 'Group' button to the 'Manage Groups' dialog on the right. The 'Manage Groups' dialog shows a 'Name' field with the value 'Demo'. Below the name field, there are radio buttons for 'Input Controls', 'Entire document', and 'Current report'. The 'Input Controls' radio button is selected. At the bottom, there is a table with two columns: 'Input Controls' and 'Groups'. The 'Input Controls' column has four rows, each with a checked checkbox: 'Input Controls', 'Fund Group (ORF, PAC, Etc.)', 'Fund Code / Descr', and 'Program Code / Descr'. The 'Groups' column is empty.

Input Controls	Groups
<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	



MARS Support Information

- **Hours: Mon-Fri 7:30 am - 5:30 pm EST**
- **Contact Information**
 - **Email**
 - mars.support@noaa.gov
 - **Phone**
 - (301) 427-8888
 - **Fax**
 - (301) 713-1742